

Work Order ID 145366

Thursday, May 05, 2016 3:19:01 PM

145366

Page 1

Ship ASAP

Item ID: D2362-041 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: 350 Pre-Flite Step
 Start Date: 6/7/2016 Start Qty: 2.00 *2* Cust Item ID:
 Required Date: 6/17/2016 Req'd Qty: 2.00 *2* Customer:
 Reference:

Approvals: Process Plan: em Date: 16/05/05 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2362	Rev E1

100 Weld per dwg A/R Aluminum rod Batch: B13/562 0.00
 Large Fab
 100
 Large Fab Memo 0.38
 Large Fab Cut D2244 extrusion 3.75" long
 Deburr D2244: 3.75
 Weld D2244-3.75 to D2362-7 as per Dwg D2362 and QSI004

24 CC 16-7-27

105 QC6- Inspect dimensions to drawing 0.00
 105
 QC Memo 0.00
 Quality Control

② 16-07-27 DAS 9 9-89

110 QC9- Inspect visual per QSI004- Fusion Welds 0.00
 110
 QC Memo 0.00
 Quality Control

② 16-07-27 DAS 9 9-89

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐				
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval		
Description Work Order Deviation			Disposition			
						Completed By
						Lead hand / Supervisor Approval Verification
						QC / QA Coordinator Approval
Root Cause		FAULT CATEGORY				
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : _____						

Work Order ID 145366

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Item ID: D2362-041

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: 350 Pre-Flite Step

Start Date: 6/7/2016 Start Qty: 2.00

2

Cust Item ID:

Required Date: 6/17/2016 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

120

Powdercoat

Powder Coating

Memo

START TIME: 11:30

OVEN TEMPERATURE: 300

FINISH TIME: 12:00

0.08

2 0 16-07-28 2348

130

QC3- Inspect Part Finish

0.00

130

QC

Quality Control

Memo

0.02

2x of 16/07/28 DAS 15 9-89

140

HandFinishing

0.00

140

HandFinish

Hand Finishing

Memo

Mask bracket and apply black anti-skid paint as per QSI 005 4.4 M134948

0.16

2x of 16/07/28

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td style="border: none;"></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Root Cause		FAULT CATEGORY																							
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		OTHER :																							

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-89
150						(2)			
QC	Memo	0.04							
Quality Control									JUL 28 2016
160	Identify as per dwg & Stock Location: <u>54-537</u>	0.00							DAS 6 2-89
160									
Packaging	Memo	0.02							AUG 02 2016
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00							
170									
QC	Memo	0.20							
Quality Control									

[Signature] 16/08/02

DAS
21
9-89

AUG 02 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Page 1

Work Order ID: 145366

145366

Parent Item: D2362-041

D2362-041

Parent Item Name: 350 Pre-Flite Step

Start Date: 6/7/2016

Required Date: 6/17/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP C00.06.26Removed P/O for powder coatEC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2244-116		Manufactured	No			100	Each	64.0000	1	2			
✓ *D2244-116*									**	<u>1</u>		<u>CC 16-7-27</u>	
STEP EXTRUSION													

Location Loc Qty Loc Code

HALL 64

117818 64

WA003 -0.0000368

D2362-7		Manufactured	No			100	Each	2.0000	1	2			
✓ *D2362-7*									**	<u>CC 16-7-27</u>			
Support Bracket													

Location Loc Qty Loc Code

ST537 2

127800 2

(2x)

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
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Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

DART



RELEASED
98.12.14 KE

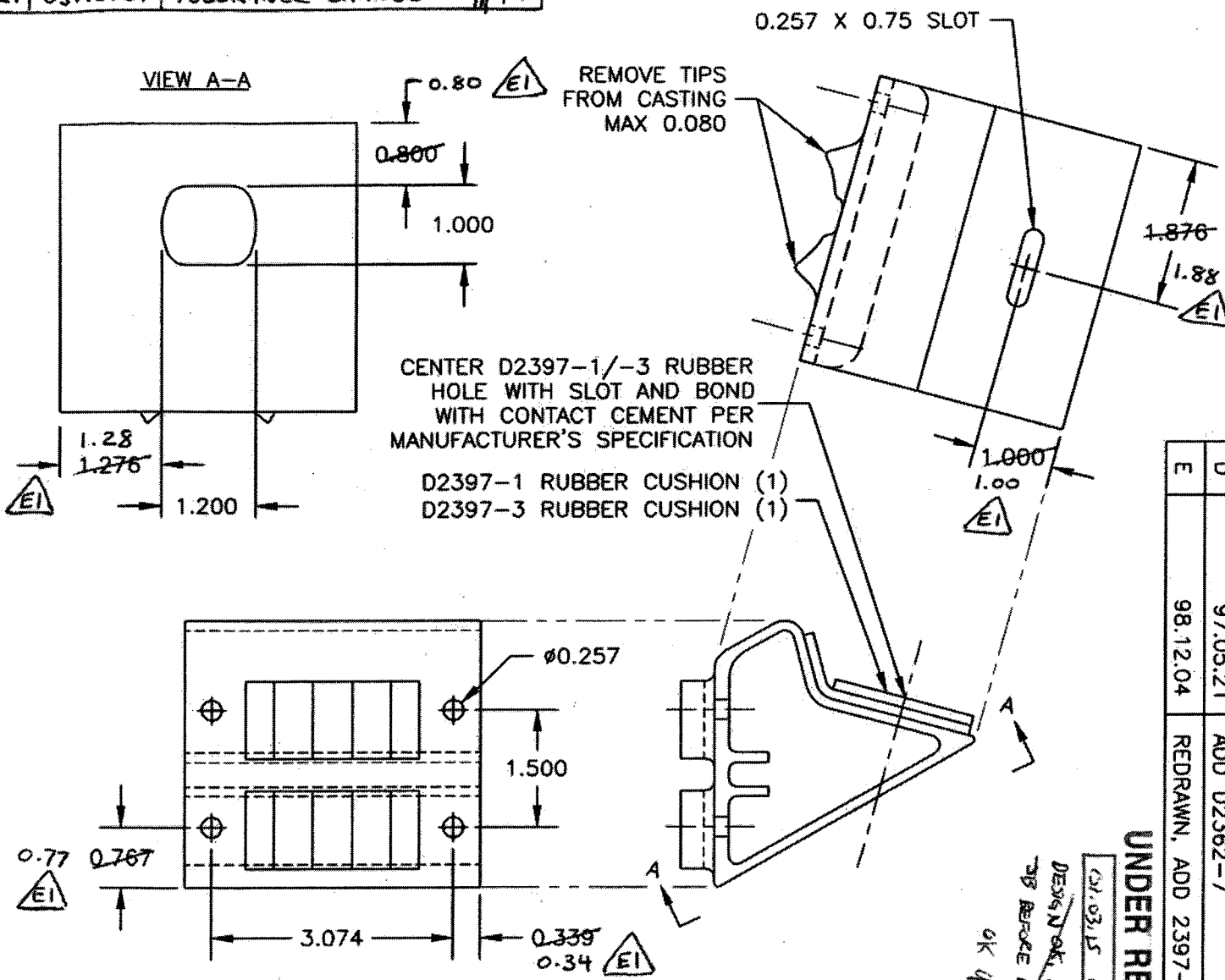
DESIGN	DRAWN BY	DART AEROSPACE LTD
BW	CP	HAMKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
KE	KE	D2362
DATE	TITLE	SHEET 1 OF 3
98.12.04	STEP SUPPORT BRACKET	SCALE
		1:2
A	95.02.15	NEW ISSUE
B	95.03.22	CHANGED RUBBER TO D2397
C	96.01.22	ADD D2362-5
D	97.05.21	ADD D2362-7
E	98.12.04	REDRAWN, ADD 2397-5

UNDER REVIEW

03.03.15 CP

DESIGN OK, BUT CHECK WITH
DB BEFORE MANUFACTURE
OK 14/04/04

D2362-3



NOTES:
MAKE FROM D2265
FINISH: POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3 BEFORE BONDING
RUBBER IN PLACE
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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w/p 145366 2m 16/05/05

DART

DESIGN	BW	DRAWN BY	CP	DART AEROSPACE LTD
CHECKED	KE	APPROVED	KE	HAMKESBURY, ONTARIO, CANADA
DATE	98.12.04	TITLE	D2362	REV. E
			STEP SUPPORT BRACKET	SHEET 2 OF 3
				SCALE 1:2

RELEASED
 98.12.14
 UNDER REVIEW

CHLOE CP

DESIGN OK, BUT EFFECT BY
 DB BEFORE MANUFACTURE

OK CP 98.12.09

MACHINE TO
 R1.100
 (TYP 2 PLACES)

REMOVE TIPS
 FROM CASTING
 MAX 0.080

0.257 X 0.75 SLOT

VIEW A-A

1.500 1.50

1.876

1.88

Ø0.257

0.100

R16.680

1.500

0.339

3.074

0.77 0.767

BLACK ANTI-SKID PAINT FOR D2362-1
 INSTALL D2397-5 (1) FOR D2362-5

D2362-1 & D2362-5

NOTES:

MAKE FROM D2265

D2362-1: BLACK ANTI-SKID PAINT PER DART QSI 005 4.4

D2362-5: INSTALL D2397-5 RUBBER CUSHION. ALIGN RUBBER HOLE WITH SLOT
 AND BOND USING CONTACT CEMENT PER MANUFACTURER'S SPECIFICATION

FINISH: POWDER COAT WHITE (REF. 4.3.5.1) PER QSI 005 4.3

BEFORE ANTI-SKID PAINT OR BEFORE INSTALLING D2397-5

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

DART



DESIGN	BW	DRAWN BY	CP	DART AEROSPACE LTD
CHECKED	KE	APPROVED	ME	HAMKESBURY, ONTARIO, CANADA
DATE	98.12.04	DRAWING NO.	D2362	REV. E
		TITLE	STEP SUPPORT BRACKET	SHEET 3 OF 3
				SCALE 1:2

UNDER REVIEW

0103/15 CP
DESIGN OK, BUT CHECK WITH
DTS BEFORE MANUFACTURE

RELEASED
98.12.14 KE

D2362-041 (SHOWN)

FINISH: POWDER COAT WHITE (REF. 4.3.5.1) PER
QSI 005 4.3
ANTI-SKID PIAINT PER QSI 005 4.4 AFTER
POWDER COATING

D2362-7 (SHOWN AS PART OF D2362-041)

MAKE FROM D2265 CASTING. DRILL D2265 AS
SHOWN IN D2362-041 ASSEMBLY

NOTES:

TOLERANCES ARE PER DART QSI 018 UNLESS
OTHERWISE NOTED

